Journal of Substance Abuse Treatment 52 (2015) 58–66

Contents lists available at ScienceDirect

Journal of Substance Abuse Treatment

The Relationship Between Psychosocial Features of Emerging Adulthood and Substance Use Change Motivation in Youth

Ilana Goodman, Ph.D. [a,b], Joanna Henderson [a,c,*], Michele Peterson-Badali, Ph.D. [b], Abby L. Goldstein, Ph.D. [b]

[a] Centre for Addiction and Mental Health, 80 Workman Way, Toronto, Ontario M6J 1H4, Canada
[b] Ontario Institute for Studies in Education, University of Toronto, 252 Bloor St. W., Toronto, Ontario M5S 1V6, Canada
[c] Department of Psychiatry, University of Toronto, 250 College St., Toronto, Ontario M5T 1R8, Canada

ARTICLE INFO

Article history:
Received 21 July 2014
Received in revised form 10 December 2014
Accepted 14 December 2014

Keywords:
Youth
Emerging adulthood
Substance use
Motivation
Psychosocial processes

ABSTRACT

Despite the peak prevalence of substance use and comorbid mental health problems during emerging adulthood little research has focused on understanding behavior change processes during this transitional period. This study extended Arnett's (2004) theory of the psychosocial features of emerging adulthood to explore how they may relate to treatment motivation (e.g., readiness to comply with treatment) and motivation to change (e.g., problem recognition and taking steps towards change). One hundred sixty-four youth presenting to outpatient substance abuse treatment completed questionnaires investigating problematic substance use, mental health, psychosocial features of emerging adulthood and motivation. Results of hierarchical regression analyses indicated that youth who perceived themselves as having greater responsibility towards others were more intrinsically motivated, recognized their substance use as problematic and were taking steps towards change. None of the other dimensions of emerging adulthood accounted for significant variance beyond relevant controls. Limitations, directions for future research and treatment implications are discussed.

1. Introduction

Compared to all other age groups across the lifespan, youth in the emerging adulthood period (late teens through early twenties; also termed transition-age youth) engage in more illicit drug and alcohol use (Canadian Center for Substance Abuse [CCSA], 2007; Substance Abuse & Mental Health Services Administration [SAMHSA], 2008) and have the highest rates of substance use disorders and comorbid psychiatric problems (Chan, Dennis, & Funk, 2008; SAMHSA, 2008). Frequent or prolonged substance use during adolescence and young adulthood renders youth at increased risk of developing numerous long term adverse effects including chronic illness, cognitive impairment, poor general physical health, concurrent mental health disorders and substance dependence into adulthood (Merline, O'Malley, Schulenberg, Bachman, & Johnston, 2004; Rohde, Lewinsohn, Kahler, Seely, & Brown, 2001; Spirito, Jelalian, Rasile, Rohrbeck, & Vinnick, 2000; Valdez, Kaplan, & Curtis, 2001). Although there is a large body of literature investigating the treatment efficacy and treatment seeking processes of older adults—and more recently adolescents—emerging adults with substance use problems have been largely under-investigated. When compared to adults and adolescents, emerging adults have lower motivation (DiClemente, Doyle, & Donovan, 2009) and demonstrate the poorest outcomes in response to interventions targeting substance use (Satre, Mertens, Arean, & Weisner, 2003; Smith, Godley, Godley, & Dennis, 2011). In order to offer effective services to emerging adults who struggle with their substance use and to prevent long-term substance use related consequences, research is needed to understand how the processes that underlie treatment seeking and behavior change function during this developmental period.

Emerging adulthood is generally recognized as the period between the ages of 18 to 25 years old, although some consider it to extend to 30 years old (Arnett, 2000), and it is characterized by developmental markers and processes that are distinct from both adolescence and adulthood in North American youth (Arnett, 2000, 2004; Martin & White, 2005; cf: Hendry & Kloep, 2007; Smith, Bahar, Cleeland, & Davis, 2014). During this period, emerging adults begin to make independent decisions regarding academic and/or vocational pursuits, residential arrangements (e.g., living with peers, independently, or remaining in the parental home) and begin to consolidate their own values and beliefs (Arnett, 2004). In addition, youth's primary relationships are also in transition: peers and romantic partners become more intimate and focal to youth identity formation and decision making, and parents tend to exert less power and influence on youth (Beyers & Seiffge, 2007; Hartup & Stevens, 1997). Although for many young people, this is a period of opportunity and growth, it is also one that is accompanied by significant stress, uncertainty and instability as a result of the new pressures associated with making the transition to adulthood and navigating the world independently (Arnett, 2004, 2005; Martin & White, 2005).

Based on qualitative data from structured interviews with emerging adults in multiple settings, Arnett (2004) posited that there are five unique psychosocial features of this developmental period. Emerging

* Corresponding author at: Joanna Henderson, Centre for Addiction and Mental Health, 80 Workman Way, Toronto, Ontario, Canada, M6J 1H4. Tel.: +1 416 535 8501x34959.
E-mail address: joanna.henderson@camh.ca (J. Henderson).

http://dx.doi.org/10.1016/j.jsat.2014.12.004
0740-5472/

adulthood is an age of *identity exploration*, as youth begin to make independent decisions and discover who they are; it is an *age of instability* as youth plan and change plans in various areas of their lives (e.g., living arrangements, career, romantic partners); emerging adulthood is the most *self-focused* life stage, with decreased responsibility to parents; it is an age of *feeling 'in between'* adolescence and adulthood; and it is an age of optimism about future *possibilities* (Arnett, 2004, 2006). Notably, Arnett (2005) further hypothesized that each of the psychosocial features of emerging adulthood renders youth at increased risk for substance use. For example, as emerging adults establish their own identities, youth are interested in a wide range of novel experiences that may involve using substances. As well, emerging adults are *self-focused*, no longer subject to the rules and standards imposed by their parents and not yet committed to romantic partnerships, parenthood, and long term careers. Thus, these youth may be less likely to monitor their behavior to avoid social consequences of substance use. Similarly, emerging adults feel "*in between*", capable of making independent decisions regarding substance use but not yet having assumed adult social roles and responsibilities. Recent evidence, however, raises questions about the hypothesized relationships between the psychosocial features of emerging adulthood and substance use for some emerging adults with longstanding substance use problems (Smith et al., 2014). Accordingly, additional empirical work is needed to examine how features of emerging adulthood contribute to problematic substance use and poor treatment engagement and outcomes.

Across varied populations with problematic substance use, studies indicate that motivation for changing problem behavior is among the strongest predictors of engagement in treatment and positive treatment outcome (Broome, Joe, & Simpson, 2001; DiClemente, 1999; DiClemente, Schlundt, & Gemmell, 2004; Wild, Cunningham, & Ryan, 2006). Two separate but related motivational constructs critical to understanding why individuals make successful changes to their substance use through treatment seeking are *motivation to change* (Prochaska, DiClemente, & Norcross, 1992) and *treatment motivation* (Ryan, Plant, & O'Malley, 1995; Wild et al., 2006). Motivation to change refers to one's personal intentions related to identifying substance use as problematic and taking steps towards change. Treatment motivation refers to an individual's intentions and willingness to seek support through treatment and his/her readiness to engage in that treatment program as a means to change. Several factors have been shown to impact motivation to change and treatment motivation including age, substance use severity and history, perceived substance use consequences and benefits, mental health functioning, social networks, and environmental context (Barnett, Goldstein, Murphy, Colby, & Monti, 2006; Bijl, de Graaf, Hiripi, et al., 2003; Breda & Helfinger, 2004; Broome et al., 2001; DiClemente, 1999, 2003, 2005; DiClemente et al., 2009; Goodman, Peterson-Badali, & Henderson, 2011; Klar, 1992; Smith et al., 2011). Moreover, motivation to achieve abstinence from substances has been found to predict abstinence in emerging adults receiving residential treatment (Hoeppner, Hoeppner, & John, 2014; Kelly & Greene, 2014; Kelly, Urbanoski, Hoeppner, & Slaymaker, 2012), although studies with youth in outpatient treatment and/or harm reduction focused treatments are lacking. Accordingly, in addition to the factors described previously, it may be useful to consider the developmental aspects of emerging adulthood and how these processes might relate to substance use change and treatment seeking in this population. For example, while increased *identity exploration* may be associated with substance use experimentation, it may also relate to an increase in contemplation about changing substance use and other problematic behaviors as youth establish their adult identities. In addition, youth who are more *self-focused* may perceive fewer external controls and thus be intrinsically motivated to seek treatment. In their investigation of youth reasons for quitting substance use, Smith, Cleeland, and Dennis (2010), found that emerging adults endorsed fewer interpersonal reasons for quitting alcohol use than adolescents, a finding that was partially mediated by the number of days being in trouble with one's family. In contrast, youth who identify having a responsibility towards others may have transitioned into more mature interpersonal relationships with both family and peers and may be more likely to examine their behavior and seek treatment.

The present study addresses two focal research questions in an outpatient treatment-seeking sample of youth with substance use concerns: (1) How do the psychosocial features of emerging adulthood relate to motivation to change and (2) How do the psychosocial features of emerging adulthood relate to treatment motivation? This study appears to be the first to explore these relations and no specific hypotheses were generated between the specific psychosocial features and motivation at the outset of the study. However, drawing on the literature regarding changes in substance use during the transition to adulthood, it was anticipated that youth who are farther along developmentally (i.e., closer to adulthood) would be more intrinsically motivated to change and to seek treatment overall. By investigating the developmental factors that motivate young people to seek treatment, this study's goal is to explore the possible constructs necessary to begin to build a developmentally appropriate motivational model that can inform clinical practice and research with emerging adults who present with substance use problems and mental health difficulties. This is particularly important for establishing best practices for this population, whose needs may not be met by either adolescent or adult service systems.

2. Material and methods

2.1. Participants

Participants [$N = 164$; 96 male (58.5%), 68 female (41.0%); aged 16 to 24 years old ($M = 19.60$; $SD = 2.40$)] were recruited from consecutive referrals to an outpatient substance use and concurrent disorders treatment program for youth aged 16 to 24 years at a publically-funded urban mental health facility in Toronto, Canada and were primarily European Canadian (see Table 1 for additional demographic information). One youth was removed from the sample due to extensive missing data. In other cases in which there was missing data, the measure instructions for addressing the missing items were followed in order to calculate scale scores. While emerging adulthood is typically described as commencing at age 18, consistent with other recent research, this study includes youth from a broader age range since emerging adult psychological processes can begin during late adolescence

Table 1
Participant demographic information (% in brackets).

	Full sample ($N = 164$)	Males ($n = 96$)	Females ($n = 68$)
Mean age (*SD*)	19.59 (2.40)	19.37 (2. 24)	19.90 (2.10)
Student	45 (27.4)	28 (29.1)	17 (25.0)
Employed full time	23 (14.0)	13 (13.5)	10 (14.7)
Employed part time	37 (23.0)	21 (22.9)	16 (23.5)
Ethnicity			
European-Canadian	107 (65.2)	59 (61.5)	48 (70.6)
Asian-Canadian	13 (7.9)	10 (10.4)	3 (4.5)
African/Caribbean-Canadian	6 (3.7)	4 (4.2)	2 (2.9)
Latin American/Hispanic-Canadian	6 (3.7)	3 (3.1)	3 (4.5)
Aboriginal	5 (3.0)	4 (4.2)	1 (1.5)
Multiple ethnicities identified	13 (7.9)	7 (7.3)	6 (8.8)
Other ethnicities	6 (3.6)	4 (4.2)	2 (2.9)
Unknown	8 (4.9)	5 (5.2)	3 (4.4)
Legal system involvement			
Within past 12 months	53 (32.3)	42 (43.8)	11 (16.2)
Previously	21 (12.8)	10 (10.4)	11 (16.2)
Mandated to treatment	20 (12.2)	17 (17.7)	3 (4.4)
Primary substance			
Alcohol only	27 (16.4)	14 (15.5)	13 (19.1)
Drug only	78 (47.6)	50 (52.1)	28 (41.2)
Both identified	55 (33.5)	29 (30.2)	26 (38.2)
Unknown/other	4 (2.4)	3 (3.1)	1(1.4)